



INTERNAL PARASITES OF POULTRY

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There are several types of internal parasites, each affecting specific parts; gape worms attack the windpipe; round worms and tape worms, the intestines; gizzard worms, the gizzard; stomach worms, the glandular stomach, and caeca worms, the caeca or blind gut.

Young birds seem more susceptible to worm infestation than older birds.

GAPE WORMS

These are "Y" shaped worms attached in the windpipe of the bird causing choking. They are very rare in Alberta, but if found can be treated by dipping a long feather in turpentine, and then insert the feather down the windpipe, twisting as the feather is inserted and drawn out.

GIZZARD, CROP AND STOMACH WORMS

These do not cause any great losses in Alberta. Control rests with sanitation. If these worms are isolated various worm capsules or powder can be procured for their control.

ROUND WORMS

These are very common and are found in the intestines.



Section of intestine showing roundworms protruding.
(After Bradshaw.)

The round worm resembles a piece of fine, white string, and may be up to three inches or more in length. (See illustration.) They may occur in large enough numbers to completely close the intestines.

Symptoms: Paleness of head and shanks, loss of flesh and appetite, inactivity, drooping wings and general unthriftiness. In advanced cases, paralysis and blindness may occur. Diarrhoea occurs occasionally.

Treatment: Worm capsules in correct size for the age of the birds. Sometimes worm powders are available and are used, and where worm powders or capsules are used, they should be given according to the manufacturers' instructions.

CAECA WORMS

These are small worms ($\frac{1}{4}$ " to $\frac{1}{2}$ " in length) in the blind intestines, usually at the tip. Phenothiazine is recommended for the treatment of caeca worms, this can usually be obtained in capsule form from any feed store or poultry supply house.

Note: Caution must be exercised when using Phenothiazine powder. Follow the directions on the package or those given by your druggist.

Symptoms and Treatment: As for round worms. As caeca worms are the main carriers of blackhead infection in our turkeys and chickens, every precaution should be taken to see that these parasites are not allowed to develop. Turkeys and chickens should never be allowed to range or house together.

TAPE WORMS

These are white, flat worms, in definite segments (see illustration), found in the intestines.

Symptoms: As for round worms.

Post Mortem: Tape worms in the intestine, and with some forms, nodules are present (somewhat resembling tuberculosis).

Treatment: Tape worms require more drastic treatment than do round worms, individual treatment being the only satisfactory method. Kamala capsules, or "Rota-caps," may be obtained from poultry supply houses, and these should be administered according to manufacturers' instructions. Move birds to fresh range as soon as treatment is completed.

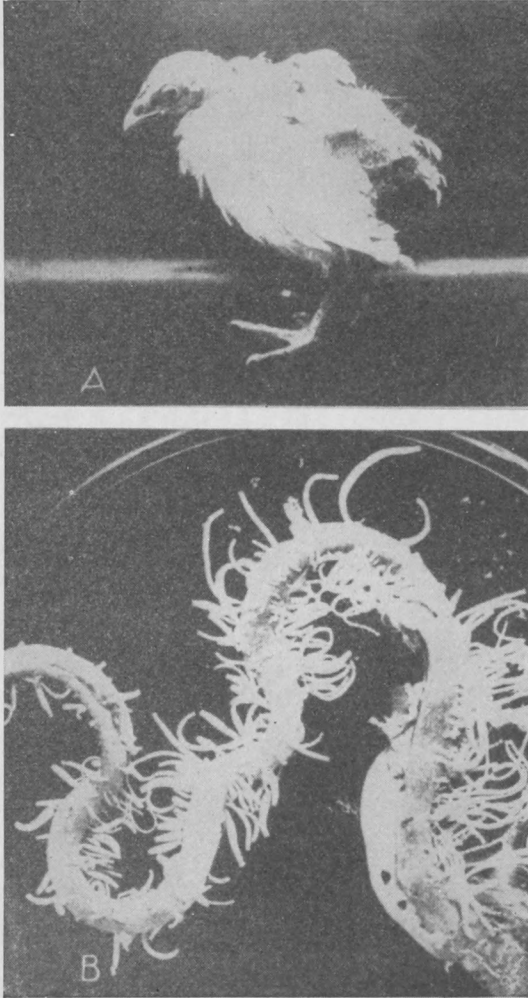
Lye Treatment: One tablespoon of common lye is added to one gallon of oats or other grain, and the mixture covered with water and cooked for two hours. The flock is fasted from noon to the next morning and then given as much of the treated grain as they will eat, with plenty of drinking water available. The birds should be confined for twenty-four hours following the administration of any treatment, so that the droppings and litter may be collected and burned.

Turkeys: Turkeys are affected with various types of worms that affect chickens, and the same precautionary and sanitary measures should be taken with the turkeys, or any form of poultry on the farm, that is recommended for chickens.

It should be noted that where birds are changed frequently to clean ground on the range and where strict sanitation is practiced, outbreaks of worm infestation are rarely found.

Prevention: Since tape worms require a secondary host to complete their life cycles, infestations may be prevented by removing debris, old lumber, manure piles, etc., which attract flies, slugs, beetles, etc., which devour the worm eggs, and infest the chickens with tape worms when eaten by them.

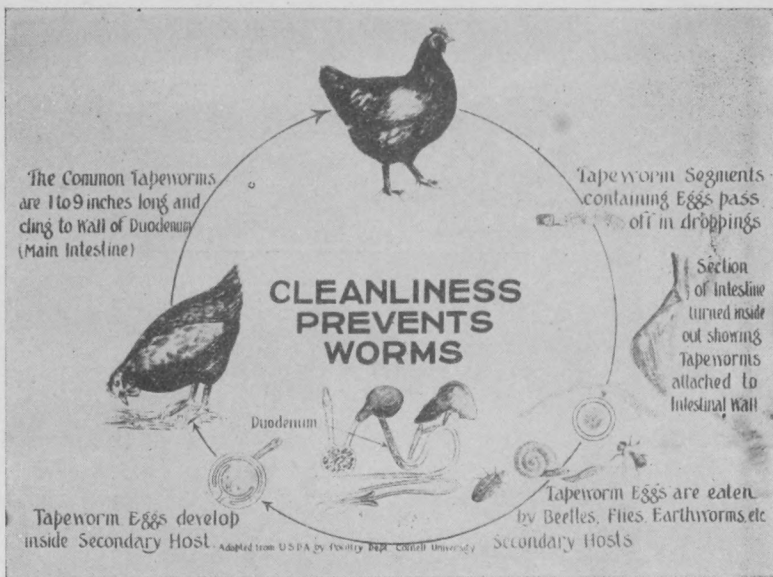
Strict sanitation is essential.



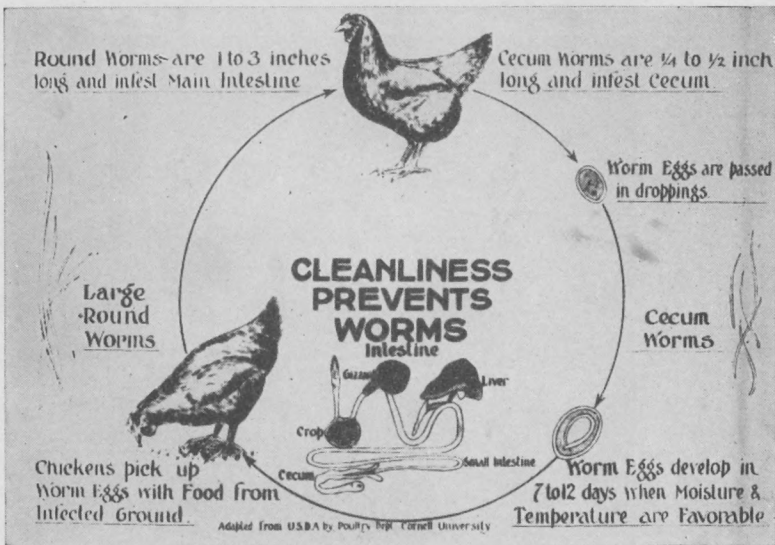
(A) A chick three months old heavily infested with tapeworms. (B) A portion of the intestines of chick A.

—Courtesy J. E. Ackert.

The illustration of the life cycles of worms, shows the means of infestation. Sanitary measures include filling of mud and water holes, proper drainage, use of fresh ground for raising young stock, daily cleaning of droppings, boards, wire mesh under perches to keep birds from picking droppings, and segregation of young from old birds.



Life cycle of poultry tapeworm.



Life cycle of large roundworm and of cecum worm of poultry.

Range lands should be ploughed down and seeded after use and birds kept off for at least two years, i.e., the range should provide for a three-year rotation. Do not use chicken manure to fertilize range lands.

Note: Some species of tape and round worms are microscopic in size. If no large worms are seen on post-mortems, and worms are suspected, some live specimens should be sent, express prepaid, to the laboratory for examination.